

COMMUNITY EXPLORER ONLINE (CEO) USER GUIDE

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Community Explorer Online (CEO) has been created by Fuss & O'Neill Technologies to allow municipalities to access their Geographic Information Systems (GIS) data using a web browser, providing an easy-to-use tool for querying municipal information and viewing maps.

This guide provides information about the functionality of CEO, and how to accomplish certain tasks using the product. The guide assumes that the reader is already familiar with the use of a web browser, and that the reader has no familiarity with GIS software.

System Requirements

- CEO has been designed to work best with monitors that have 1024x768 pixel resolution or higher. Lower resolution monitors will not be able to display the entire window, which means that the user will need to scroll from top to bottom or from left to right.

If you find that you cannot see the entire map window, you may be able to simply increase the resolution of your monitor. To do so, take the following steps:

- Click on your "Start" button, click the Settings option, and then click the Control Panel option.
 - When the Control Panel window opens, double-click on the Display icon
 - Click on the Settings tab
 - Where it says "Screen Resolution", drag the bar over to the right until the screen resolution is 1024x768 (or greater). If you have dragged the bar as far as it will go to the right, and the resolution is still less than 1024x768, your video card does not support the resolution needed to make the scrolling disappear.
 - Click the "Apply" button. The screen may temporarily turn black.
 - You may get a message saying "Your desktop has been reconfigured. Do you want to keep these settings?" If you get this message, click "Yes"
 - Click the "OK" button to close the Display window.
 - Close the Control Panel window.
- CEO has been designed to work best with Microsoft's Internet Explorer 5.5 or higher. CEO also works with Mozilla and Firefox browsers, but some functionality is disabled when using these browsers. Those functions are identified below.
- CEO generates Adobe Acrobat (PDF) files when generating printable maps, property reports, or mailing labels. To view these PDF files, you will need to have a minimum of Adobe Acrobat Reader 5.0. The latest version of Adobe Acrobat Reader can be freely downloaded from: <http://www.adobe.com/products/acrobat/readstep2.html>
- There are some features in CEO that generate popup windows, so some configuration may be needed to allow popup windows from this site. Since there are many products that block popup windows, this document does not explain how to configure all of the products. However, the most popular popup blockers display a message when a popup has been blocked, and you can usually click on the message to allow the popups.

Starting Community Explorer Online

When you start CEO, you will see a “splash” page that looks something like this:



Figure 1: CEO Splash Page

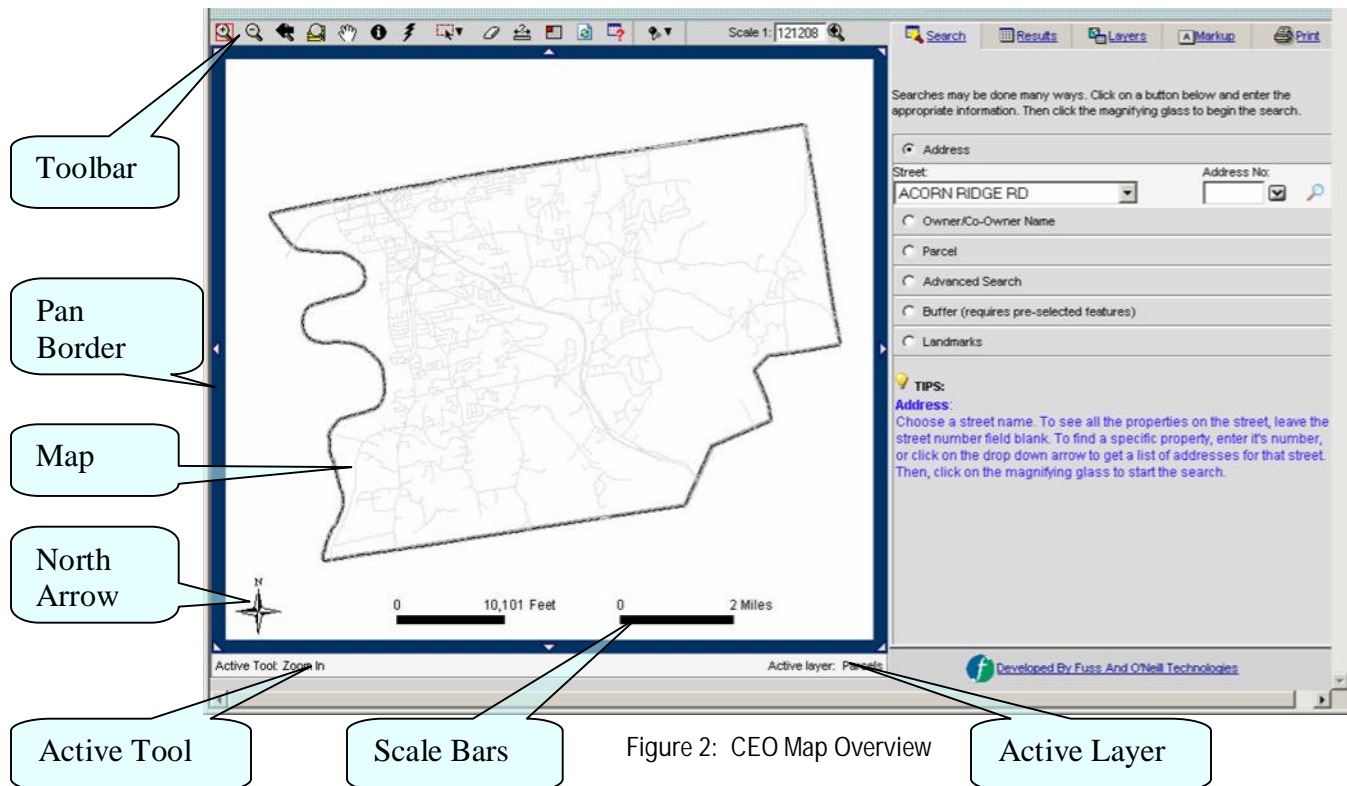
The splash page contains the following:

- In the navigation bar at the top of the page, a “Login” link appears. CEO does not require a login. If, however, you want to access any maps or data that have been restricted by the municipality, you will need to click on the Login link and provide a valid ID and password in order to access the restricted information.
- On the left, a list of useful links.
- Text containing information about system requirements, the municipal contact person for the site, and a disclaimer about the use of the data in the site
- A list of available maps. If there is only one map available to you, the name of the map will appear in blue. If you have multiple maps to select from, choose a map from the drop-down list that appears.
- A button to view the map

Click on the “Accept Disclaimer and Go to GIS Page” button to access CEO.

Overview

There are some items that always appear on the page in CEO. These items are shown below:








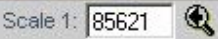

- The Banner is customized for each municipality, and will look like the municipality's web site banner wherever possible
- The Toolbar contains a number of buttons that allow you to perform actions on the map. These buttons are described in more detail on the next pages
- The Pan Border allows you to quickly change the portion of the map that you are viewing. Click on the border to the left, and you will see more of the map on the left.
- The Map shows you the requested area of the town, with the requested set of information.
- The North Arrow shows you which way is North on the map.
- The Active Tool tells you which button you last pressed in the Toolbar. When you move your mouse over the map, it shows you the coordinates of the location on the map.
- The Scale Bars show you "real world" distances superimposed upon the map, so that you can better get a sense of the area covered by the map.
- The Active Layer tells you what type of map feature (such as parcels, streets, schools, etc.) is currently active. Several tools in the toolbar, such as the Select tool, operate on the Active Layer.

Note that the normal web browser menus and toolbars have been removed in order to provide more space for the map.

Toolbar

The CEO toolbar provides a set of actions that you can perform on the map. If you move your mouse over any of the icons, a description of the icon will appear. An explanation of the tools is provided below:

Navigation Tools

Icon	Tool Name	Description
	Zoom In	This tool allows you to magnify a portion of your existing map. After clicking on this tool, drag your mouse to create a rectangle over the portion of the map that you want to see magnified.
	Zoom Out	This tool allows you to shrink your existing map. After clicking on this tool, drag your mouse to create a rectangle over a portion of the map. The existing map will shrink to fit into the rectangle, and additional area outside of the current map will be shown in the areas outside of your rectangle.
	Zoom Previous	After changing the portion of the municipality that you are viewing (by zooming or panning), you can get back to the previous portion that you were viewing by clicking this tool. CEO remembers all of the portions that you have viewed in the current browser window, so you can keep pressing this button until you get back to the portion that you want.
	Zoom to Full Extent	If you want to see the full municipality, click on this tool.
	Pan	To re-center the map, click on this tool. After clicking on the icon, drag the map where you want it to be. If you want to move the existing map up (so that you can see more area below), drag the map up. You can control how far to drag the map.
	Zoom to Scale	To view the map at a specified scale, you can type the scale in this box and click on the icon to the right. A scale of 1200 is the same as 1" = 100'. A scale of 2400 is the same as 1" = 200'.
	Overview	When your map shows only a small part of the municipality, it can be useful to know where your map is in relation to the municipality as a whole. In addition to displaying the map that you want to see, CEO can display an overview map that shows the entire municipality and a red rectangle showing where the map is within the municipality. Clicking on

		this tool either makes the overview map visible (if it isn't) or invisible (if it is).
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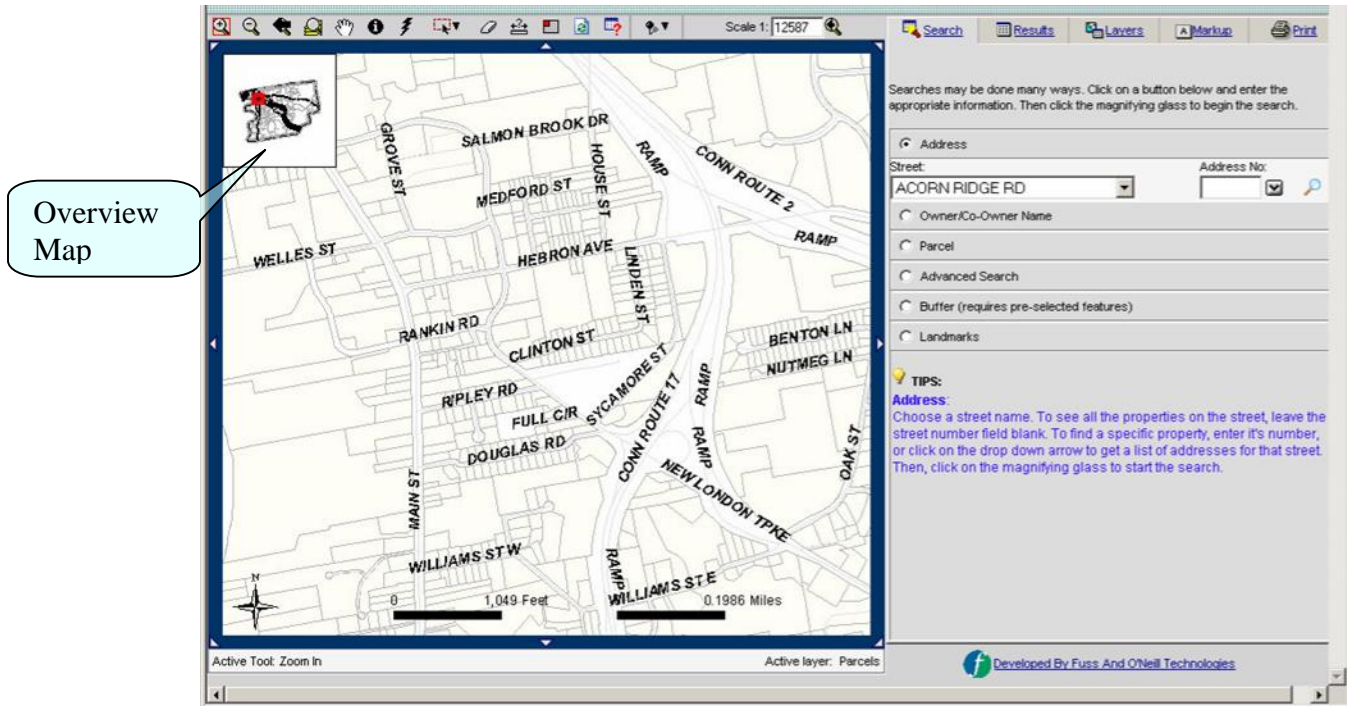
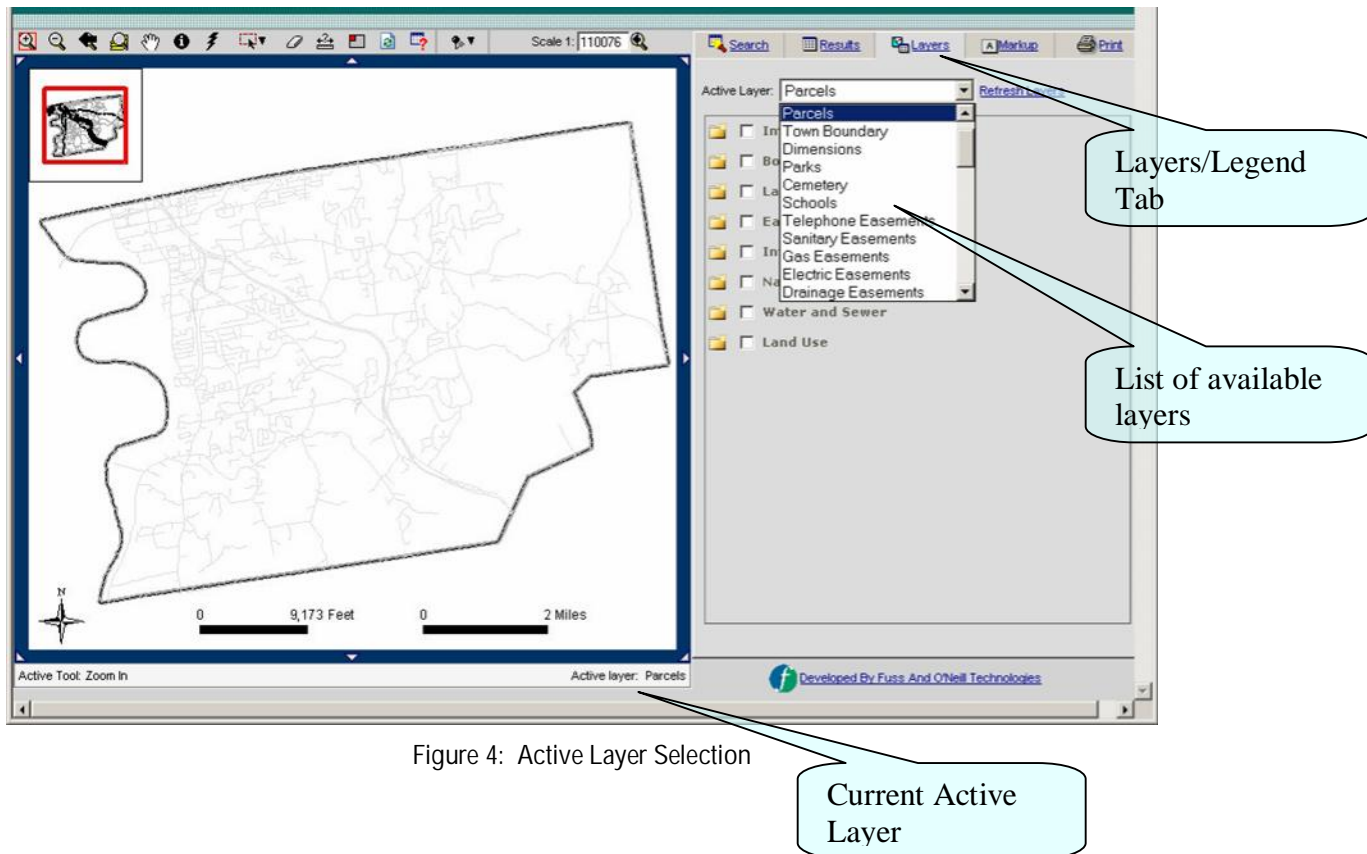


Figure 3: Overview Map

Map Feature Tools

The following tools involve the selection of features on the map. CEO allows you to select feature(s) in the "Active Layer", which is one of the types of features displayed on the map. At the bottom of the screen, CEO tells you which layer is the Active Layer. To change the Active layer, click on the "Layers/Legends" tab on the right, and then choose the Active Layer from a list of Active Layers.



After selecting one or more features, you will see a window that may look something like this:

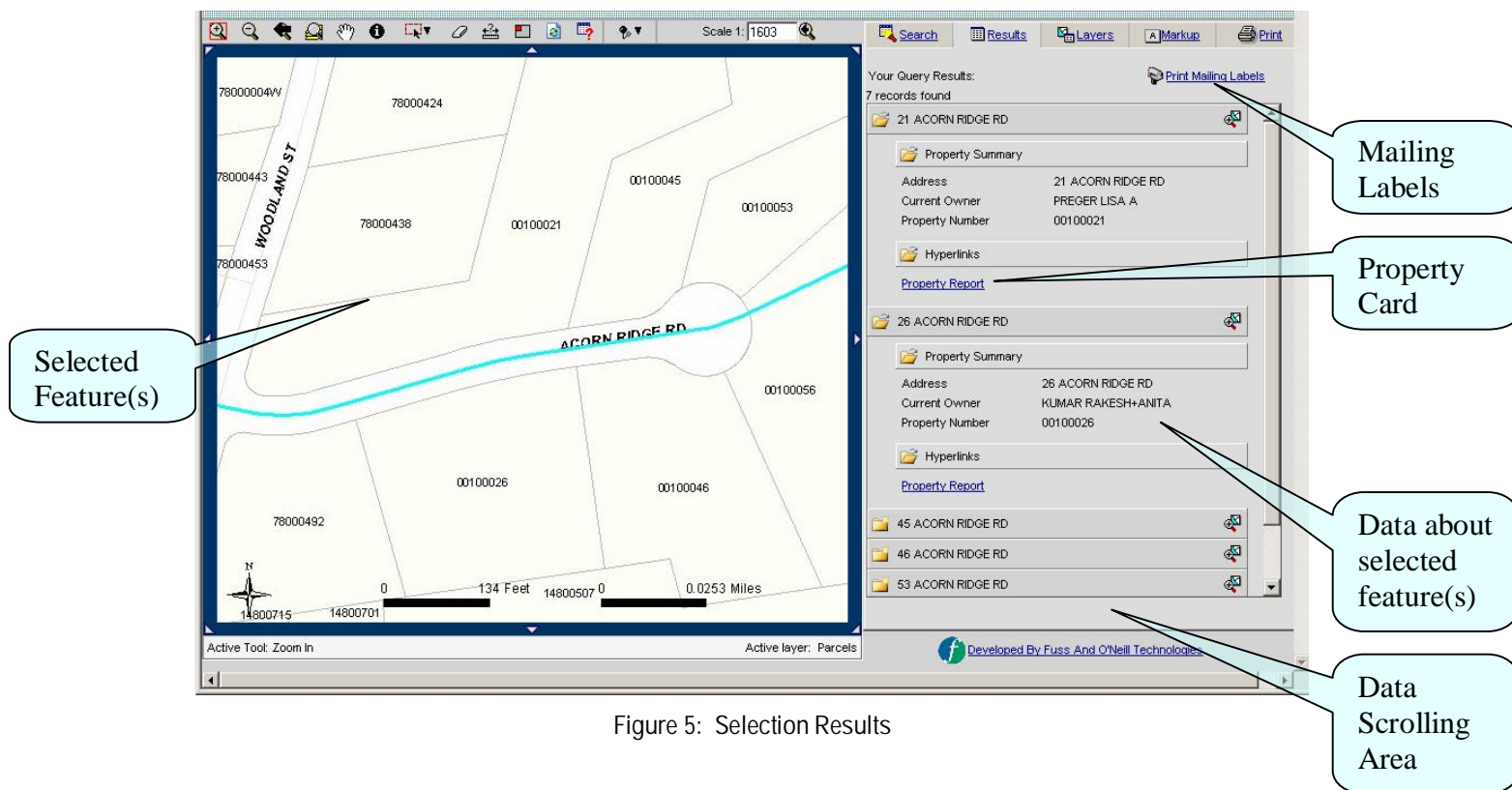


Figure 5: Selection Results

- The Selected Feature(s) will be highlighted on the map in blue.
- The Data about Selected Feature(s) will appear on the Results page on the right side of the window. If you selected multiple features, you will see all of the data for the first feature, then the data for the second feature, etc. You may need to scroll vertically to view all of the data that is available. This area shows you information for up to 30 selected features.
- The Data Scrolling Area allows you to view additional data when there are more than 30 selected features. You will see links to the Next Page or the Previous Page of data. Each page contains information for up to 30 features.
- If your Active Layer is Parcels, then a Property Card icon will appear next to the data for each selected parcel. Clicking this link will display a PDF file containing information about the parcel from the municipality's assessor database. If, for example, you click on a condominium parcel, the property card will show a page for each condominium unit.

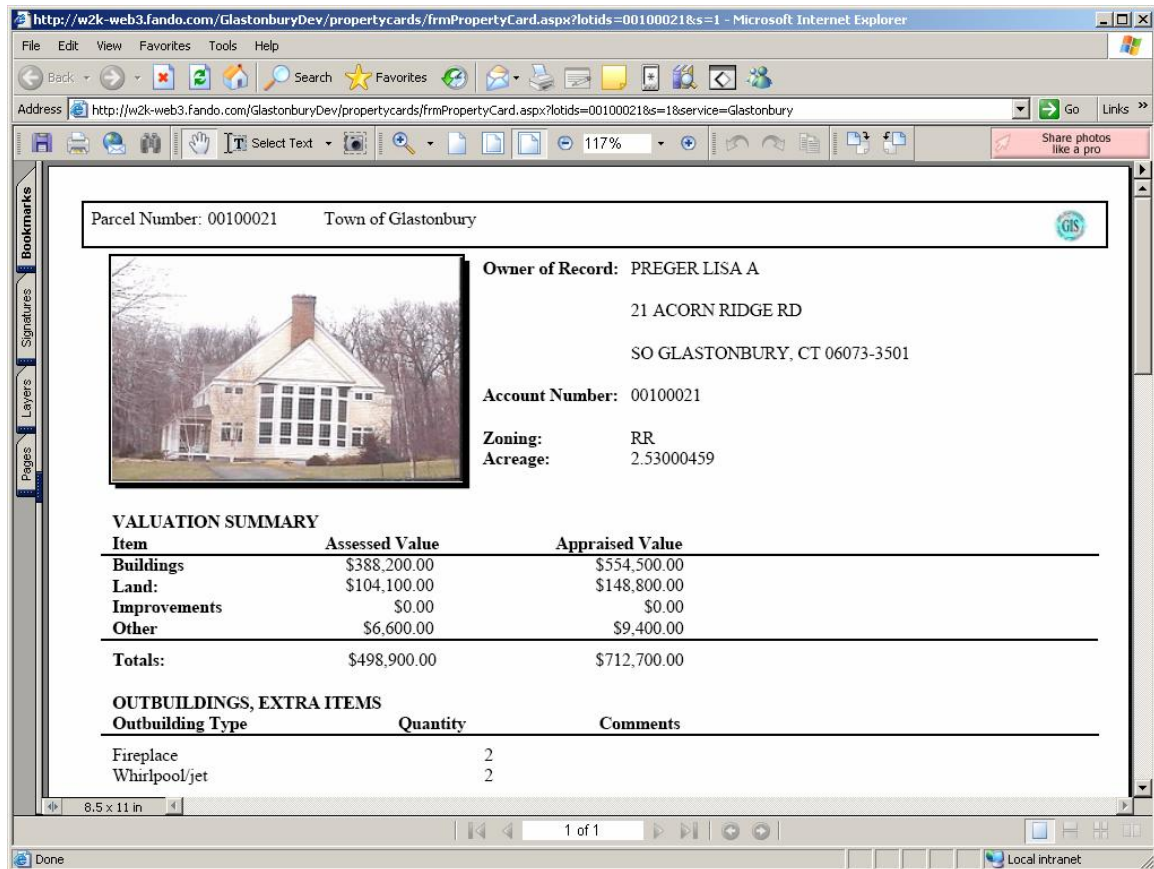


Figure 6: Sample Property Card

- If your Active Layer is Parcels, then a Mailing Label icon appears, allowing you to create a PDF file that can be printed on Avery 5160 labels. This PDF file will contain a list of all owners of record for all of the selected parcels.

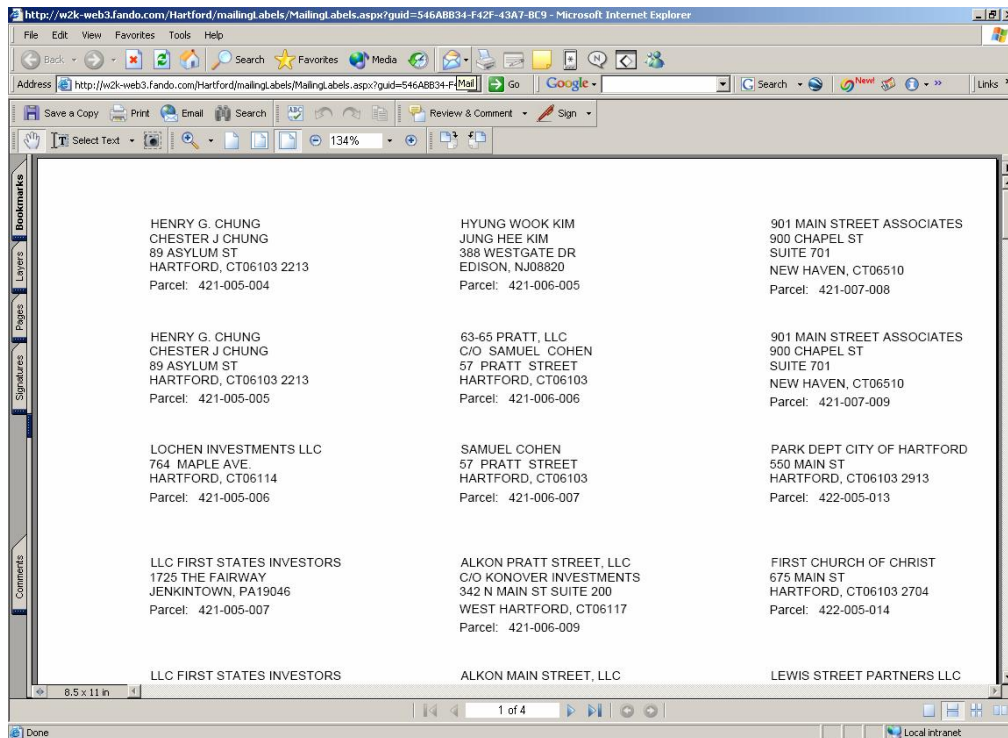
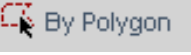









Figure 7: Sample Mailing Labels

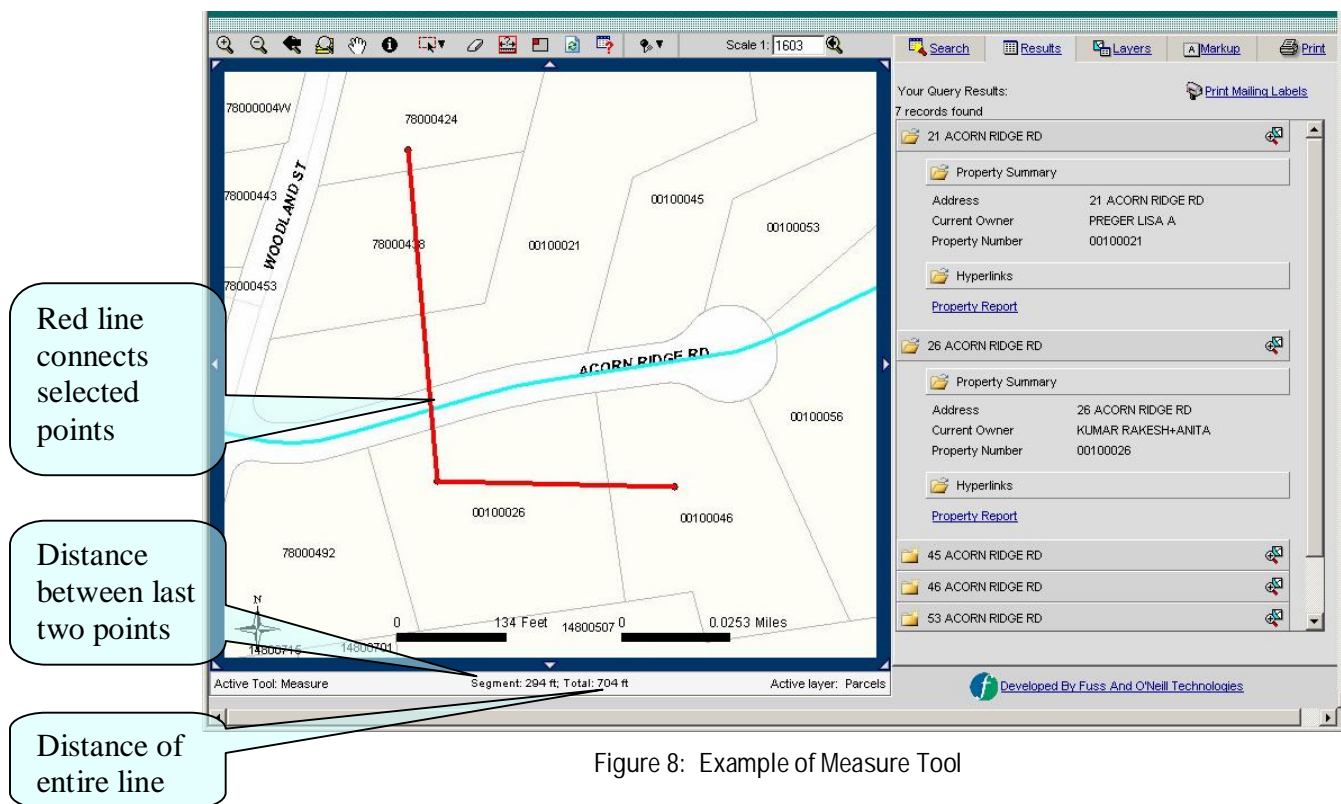
Icon	Tool Name	Description
	Identify	This tool allows you to display information about a single map feature that you click on. After selecting the active layer, and clicking on the tool, click on a feature on the map
	Select by Rectangle	This tool allows you to draw a temporary rectangle on the map, and to select all of the map features that are either fully within the rectangle or are partially within the rectangle.
	Select by Radius	This tool allows you to draw a temporary circle on the map, and to select all of the map features that are either fully within the circle or are partially within the circle. To draw the circle, click on the center point of the circle, and then drag the mouse so that the circle is the appropriate size. Note: When using Mozilla/Firefox browsers, the circle does not appear on the screen as you drag your mouse.
	Select by Line	This tool allows you to draw a temporary line on the map, and to select all of the map features that intersect with the line. To draw the line, click on one end of the line and then drag to the other end of the

		line. Note: When using Mozilla/Firefox browsers, the line does not appear on the screen as you drag your mouse.
	Select by Polygon	This tool allows you to draw a polygon on the map, and to select all of the map features that are either fully within the polygon or are partially within the polygon. To draw the polygon, trace the perimeter of the polygon by clicking on each corner of the polygon, always going in the same direction around the perimeter. When you have defined the perimeter of the polygon, double-click with the mouse. Note: When using Mozilla/Firefox browsers, this tool is not available.
	Clear	This tool unselects all features on the map.

Other Tools

Icon	Tool Name	Description
	Measure Distance	This tool allows you to measure the distance between two or more points on your map. After clicking on the icon, you can click on two or more points to create a line on your map. CEO displays two distance numbers at the bottom of the screen: the distance between the last two points you clicked on, and the total length of the line.
	Get Latitude/Longitude	This tool allows you to obtain the latitude and longitude of any point on the map. Move the mouse to the desired location, and the latitude/longitude will appear. Keep in mind that these coordinates are an approximation, and are more accurate as you zoom in further. The coordinates should be accurate to within a second or less.
	Get Map Coordinates	This tool allows you to determine the northing and easting coordinates in your local state plane coordinate system. State plane coordinates are the standard method for state and local agencies to describe geographic locations. Move the mouse to the desired location, and the latitude/longitude will appear.
	Measure Area	This tool allows you to determine the area of a polygon. Click on this tool, and then proceed to define the perimeter of a polygon by clicking on the corners of the polygon (either in clockwise order or counter-clockwise order). The web site assumes

		that there is a straight line between the last point you clicked and the first point you clicked. As you click on the corners, the area of the polygon will appear below the map, shown in square feet, acres, and square miles.
	Refresh	Clicking on this icon redisplay the map using the latest options that you've specified (such as which types of map features to display).
	Help	Clicking on this icon displays this help document.



Search Page

The search page allows you to find property owners that meet conditions that you specify. You can search by address, or by owner name, or by the parcel's map/block/lot, or by proximity to selected features.

Address Search

The Address search allows you to search for people that own property at a specific address, or for all owners that own property on a street. Note that the owners may not live at the property, so the owners mailing addresses may not match the address that you enter. Leave the street number field empty to search for all property owners on the specified street.

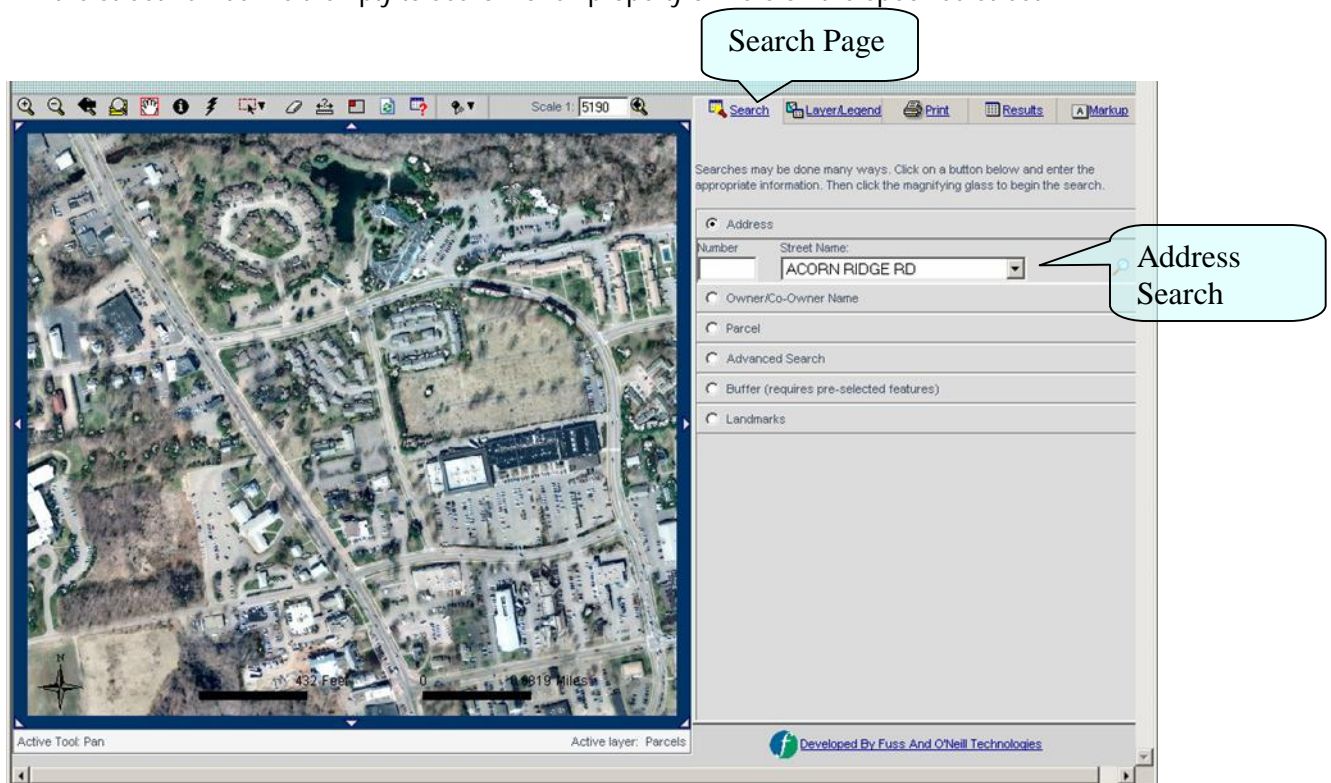
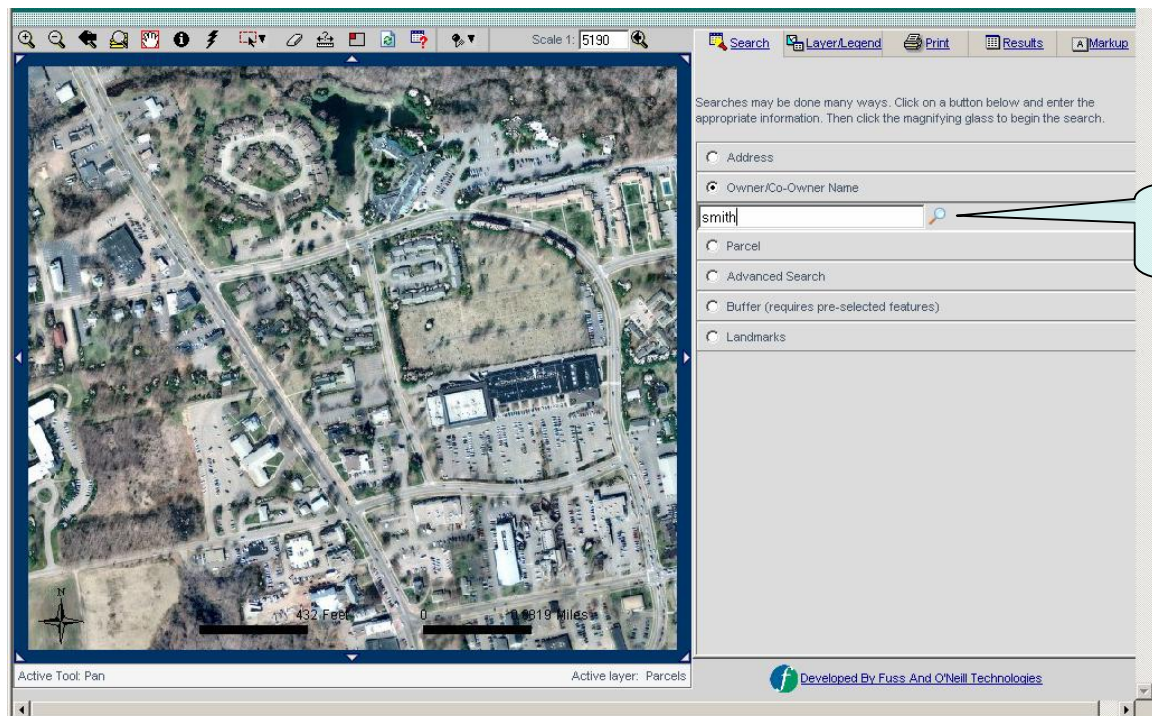


Figure 9: Search Page – Address Search

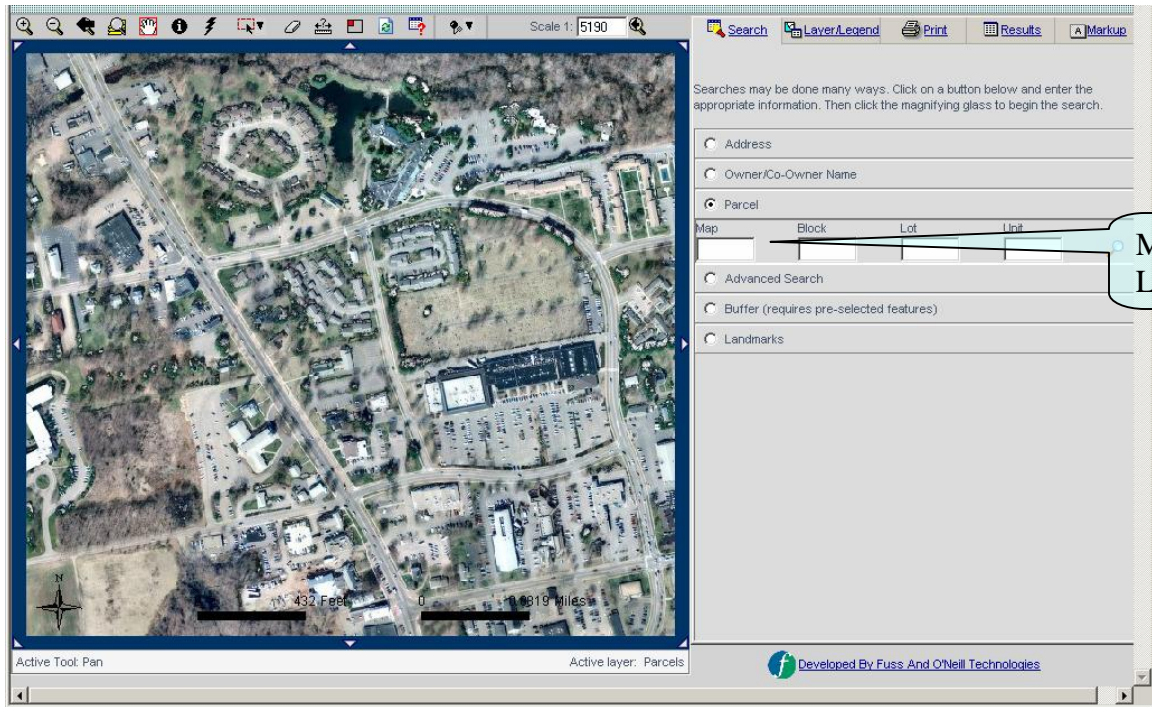
Owner Search

The Owner search allows you to search for property owners and co-owners based on their name. You may enter any portion of the owner's (or co-owner's) first or last name that appears on the deed. The search is not case-sensitive, so you can enter all lower-case letters or all upper-case letters if you want. As a result, a search for "SMITH" will find owners named "Smith", "SMITHSON", etc. You can also use wildcard characters if you like: a "%" sign matches one or more characters, and "_" matches one character. For example, searching for "ANDERS_N" will find all Andersons and Andersens. Searching for "O%BRIEN" will find all "OBrien"s and "O'Brien"s. When you are done entering the name, press the Enter key or click on the search icon on the right.



Map/Block/Lot Search

The Map/Block/Lot search allows you to search for owners of a specific parcel, or a group of related parcels. If you know a property's map, block, lot, or unit, enter them in the appropriate fields. You do not have to fill in all of the fields. After you are done entering the information, press the Enter key or click on the search icon on the right. The search will only match on the fields that are filled in.



Advanced Search

The Advanced search allows you to search based on any of the property attributes that are available in the CEO database. This allows you to perform more sophisticated queries, such as "all colonial homes on Main St. with 4 bedrooms that sold in 2005", or "homes on more than 5 acres with more than 5000 square feet of living space".

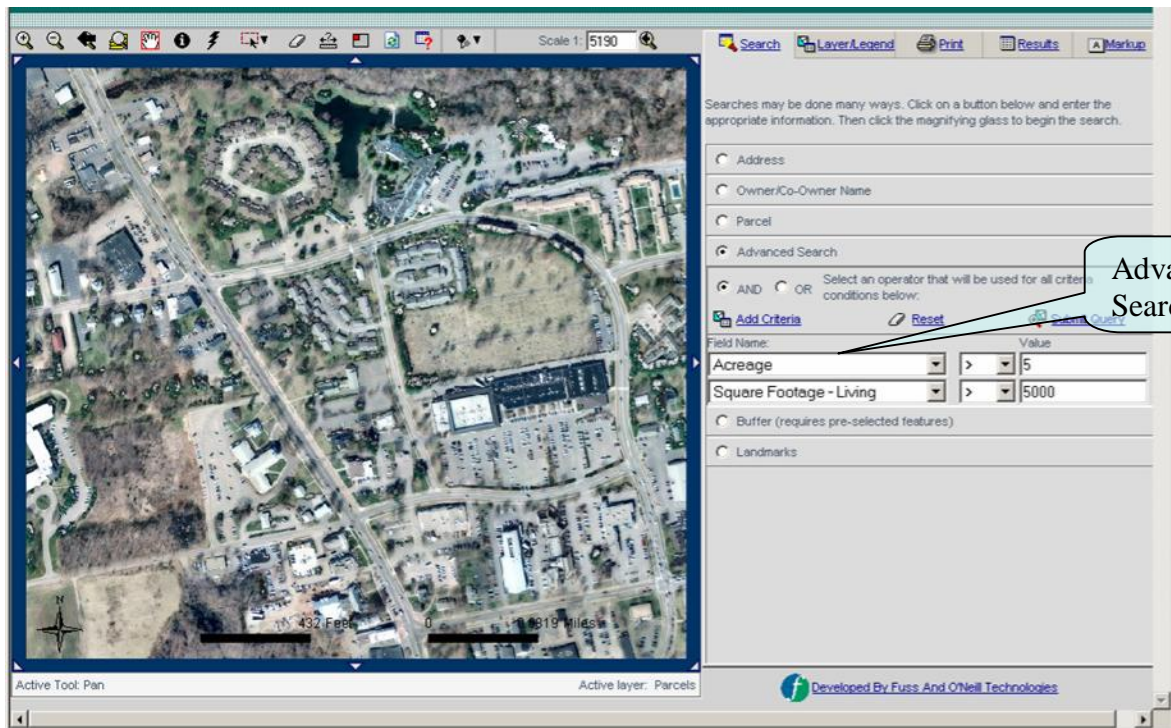
To perform an advanced search, you enter one or more search conditions, and indicate whether you want to see properties that meet ALL of your search conditions, or that match ANY of your search conditions. To choose ALL search conditions, pick the "AND" option, and to choose properties that meet ANY search condition, pick the "OR" option.

To enter a search condition, you pick a field name, an operator, and enter a search value.

- Field name. This is a list of available data about each property.
- Operator. This allows you to pick the type of query you want to perform. Most of these operators are straightforward, such as "=", "<", ">", etc. The "LIKE" operator allows you to perform a "fuzzy" search on textual
- Value. This is a value that you enter.

To enter an addition search condition, click on the "Add Criteria" link and another row will appear.

When you have completed entering your search criteria, click on the "Submit Query" link.



On each of these searches, the search results page looks similar, as follows:

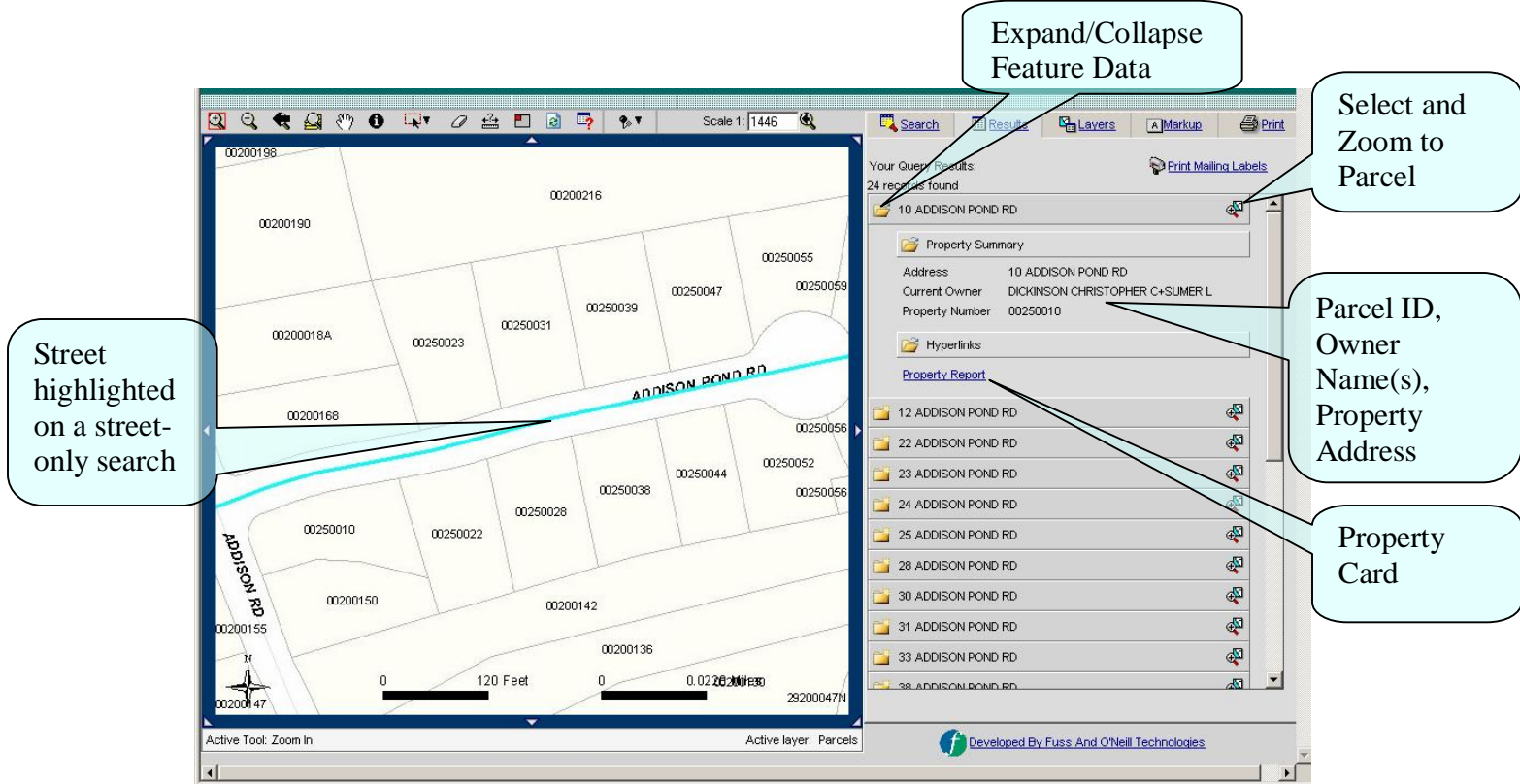


Figure 10: Search Results

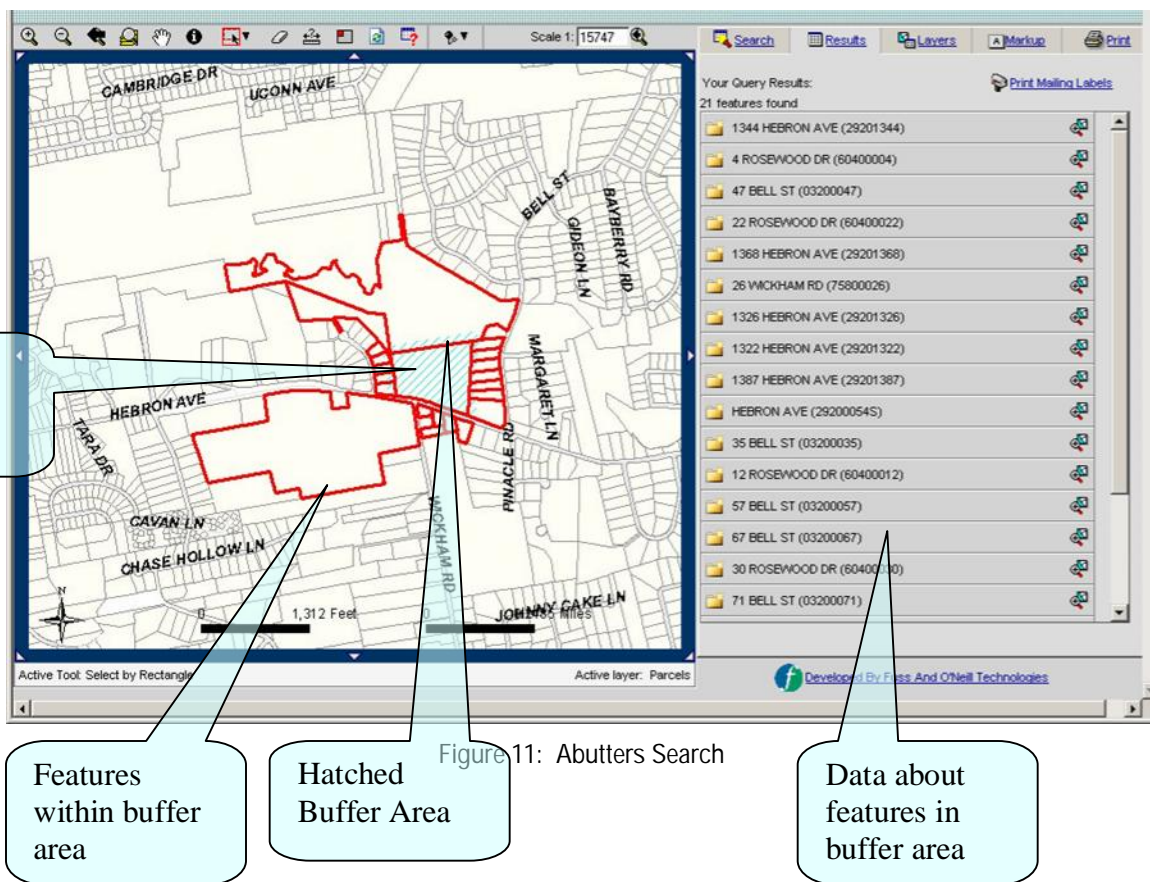
- The Results page for these searches contains data from the Assessor's database, including: the Parcel identifier, the owner name, the co-owner name (if applicable), the and the property address
- For each property owner, there is a Select and Zoom to Parcel icon that updates the map to focus on that property.
- For each property owner, there is a Property Report link that you can click to view a formatted report that shows information about the property.

The last two search options on the search page behaves differently than the other three searches:

Buffer Search

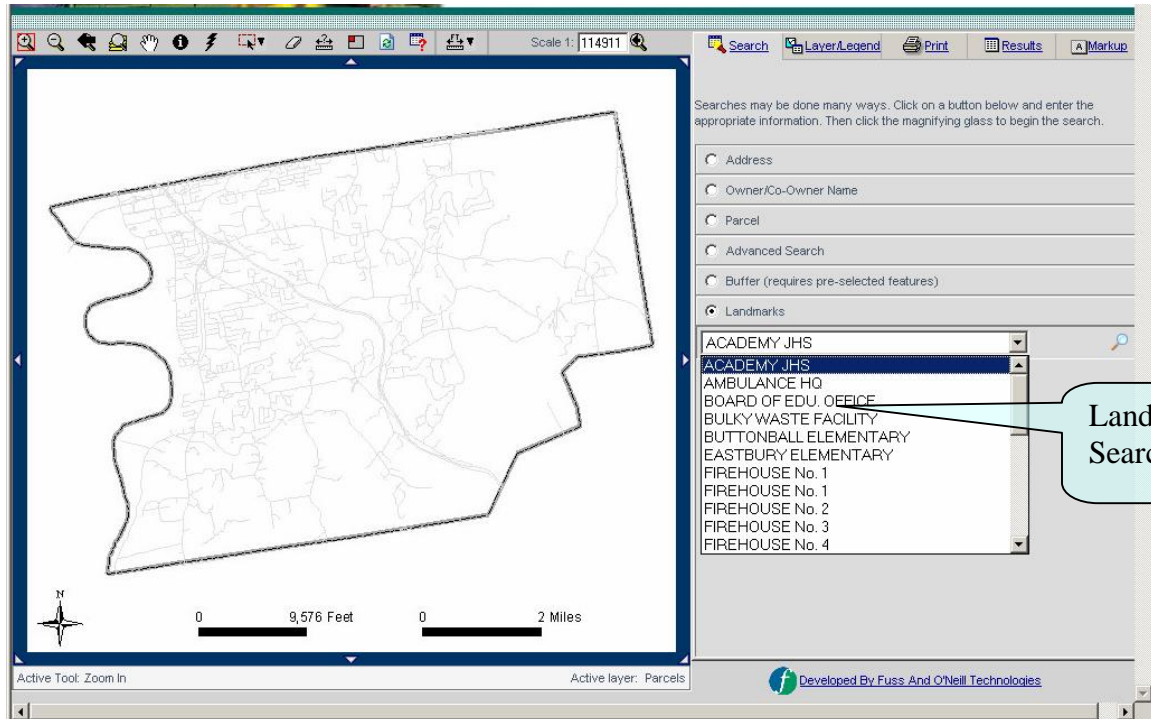
The Buffer search allows you to find map features that are within a specified distance from other map features. This is a multi-step process:

- Select one or more map features, using the instructions in the section titled "Selection Tools". You may need to change your Active Layer on the Layers page, and then will need to use one of the selection tools to select features in that layer.
- Go to the "Search" page, and select what type of map features you want to find (if it isn't already the type of feature that you want), and then enter a distance.
- CEO will create a "buffer area" surrounding your selected features. The edge of the buffer area will be the specified distance away from your selected features. CEO will then look for map features of the specified type that are at least partially within the buffer, and will select all of those features.



Landmark Search

The Landmarks Search allows you to go to a pre-defined named location within your municipality. Select a location and click on the search icon on the right.



After performing the search, the map will zoom to the landmark, and the results pane will display information about that landmark (similar to the Buffer search).

Layers/Legend Page

This page is used to control the types of features that appear on the map, and which type of features can be selected on the map.

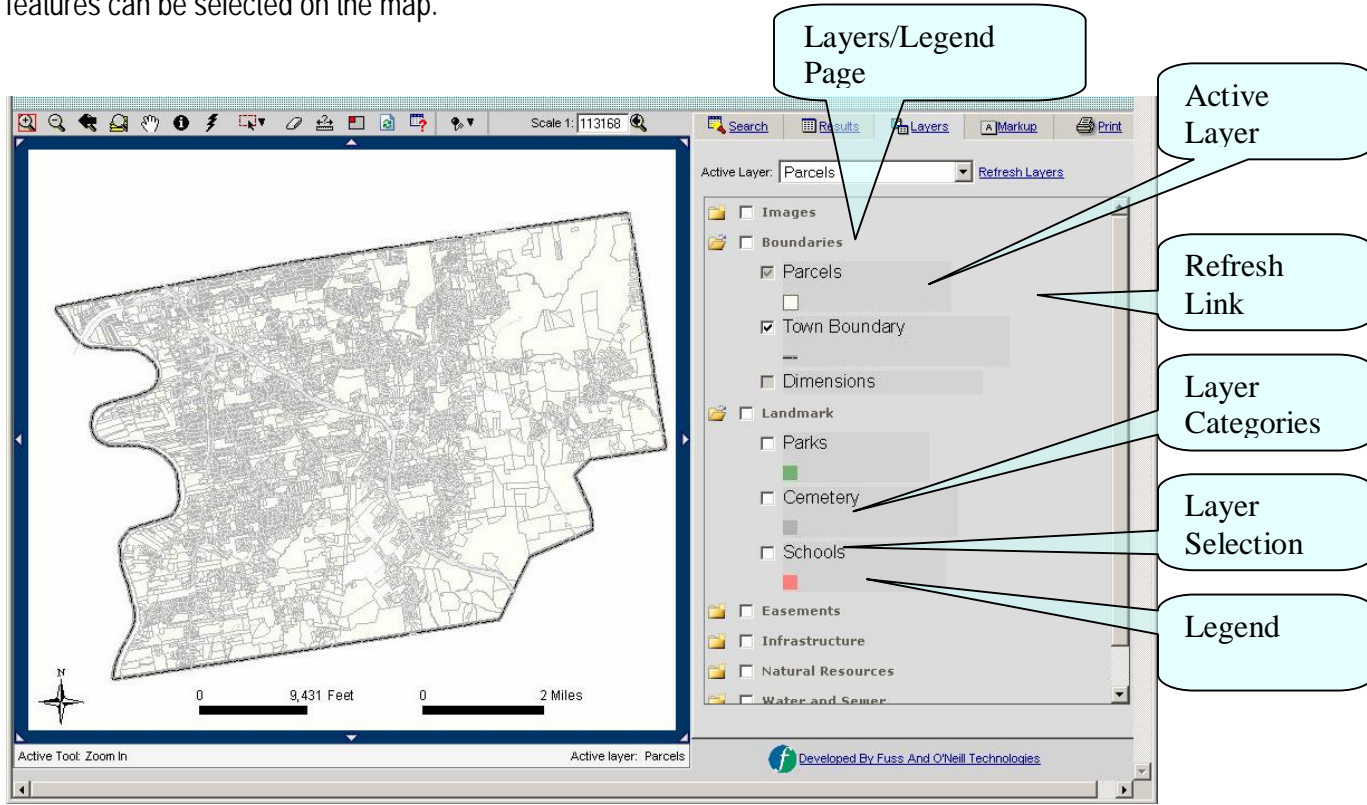


Figure 12: Layers/Legend Page

- The Layer Categories are groupings of related layers. These categories are used to simplify the display of the layers. Click on the "+" sign next to the Layer Category to see all of the layers in that category, or click on the "-" sign next to the Layer Category to hide all of the layers in that category.
- Within each Layer Category, you may see one or more map Layers listed. Each layer is a different type of map feature that can appear on your map. The checkbox next to each layer indicates whether the features in the layer should be shown on the map. If you want to hide buildings from your map, for example, uncheck the box next to the Buildings layer and then click on the Refresh link. To make it available again, check the box and click on the Refresh link. Sometimes the checkbox will be disabled because the layer cannot be viewed at your current scale (some layers can only be viewed at larger scales because they are relatively inaccurate or cover large areas, and some layers can only be viewed at smaller scales because they have a lot of features).
- The Legend shows what the map features look like on the map.
- The Active Layer dropdown lets you choose what Layer you want to be able to select on the map.

Print Page

The Print page allows you to create a customized Adobe Acrobat PDF file that contains a map and legend.

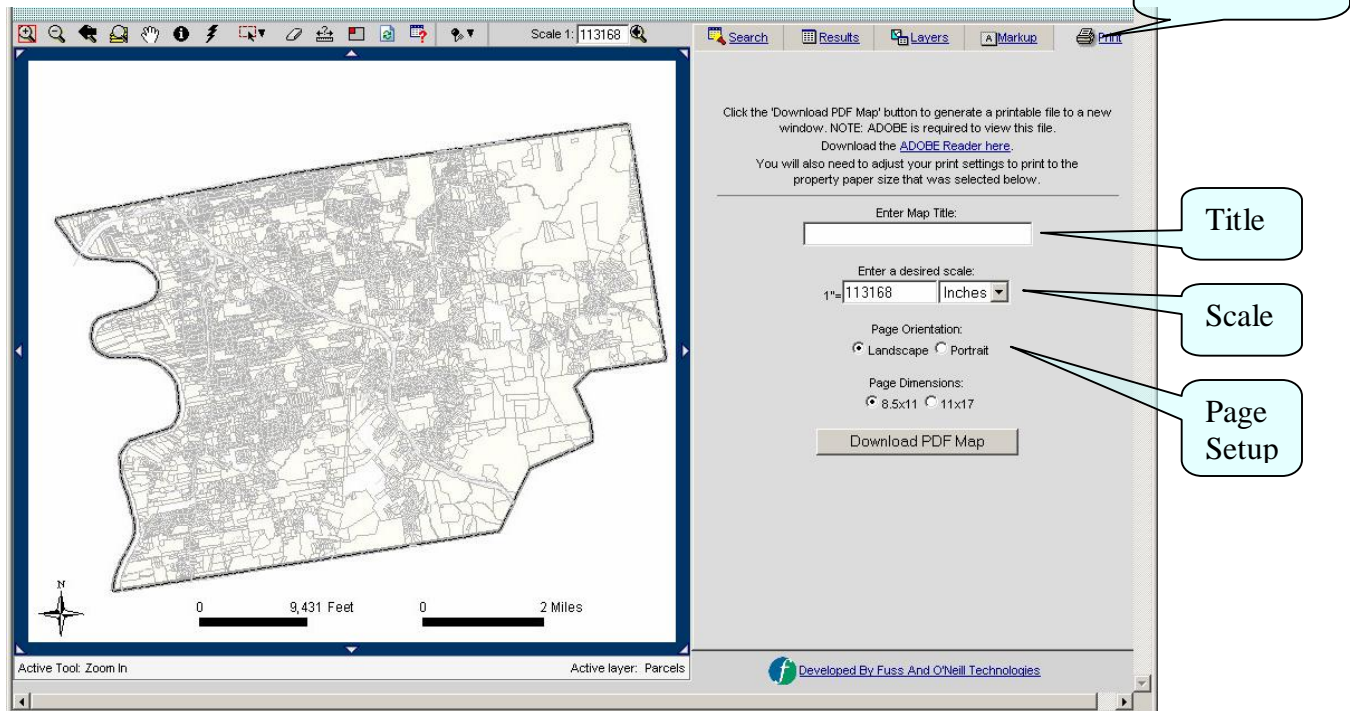


Figure 13: Print Page

To create a map, first get the map to look the way that you want it to look on the screen. Then, enter the following options:

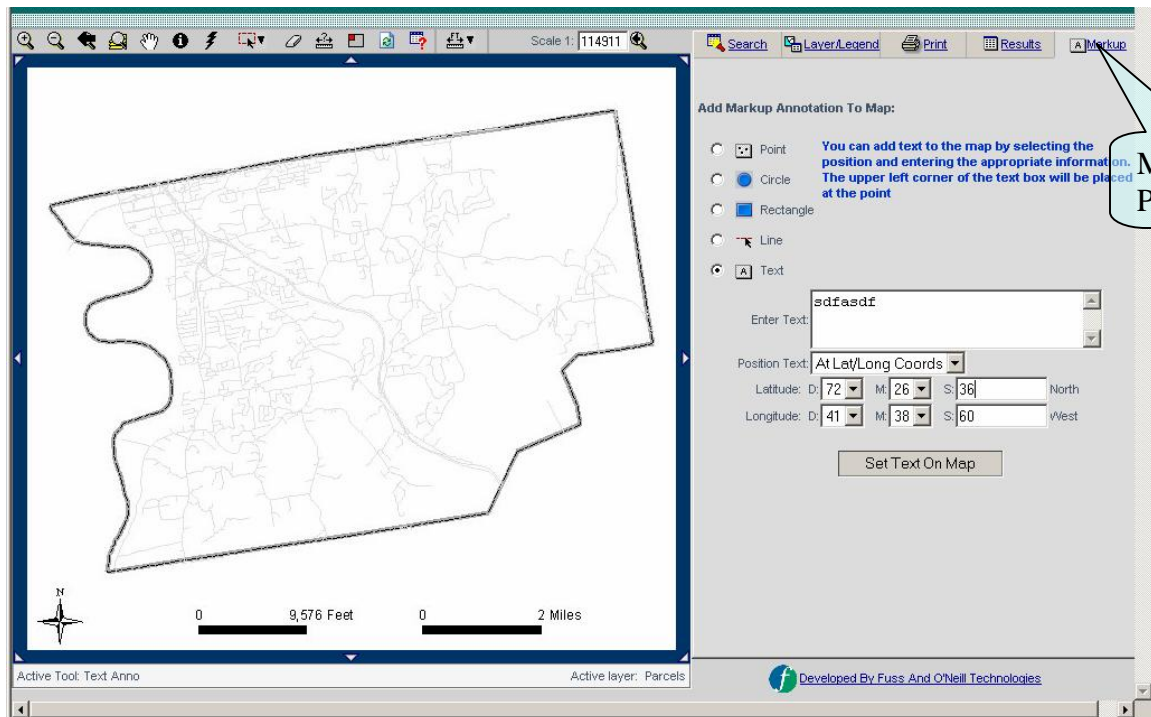
- The map Title will appear at the top of the map in the PDF file.
- If you want to override the Scale of the map in the PDF file, enter the revised scale. If you leave the scale unchanged, your map will include everything that you see on your screen. If you change the scale, the revised map will be centered on the same point as the map that appears on the screen, but the area covered will be different.
- You can select the page Orientation and Dimensions for your PDF file. The map can be printed in landscape or portrait mode, and can be printed on 8.5x11 or 11x17 paper.

After you have entered your options, click on the Download PDF Map button. This will open the PDF file in your web browser, and you can then print the PDF file or save it to a file on your machine or on a server of your choice.

Markup Page

The Markup page provides you with the ability to draw on the map. You can draw points, circles, rectangles, lines. You can also place text on the map. All of your drawings and text appear in red. Once you have drawn on the map, you can create a PDF file of the map, including your markups, that you can save or send to someone else.

Your drawings will disappear once you click on the "Clear" button in the toolbar, or when you close the browser window.



To draw on the map:

- To draw point(s), click on the "Point" option and click on the map at each location where you want a point to appear.
- To draw circle(s), click on the "Circle" option and then click and drag your mouse from the center to the perimeter of each circle that you want to draw. Note: In Mozilla/Firefox browsers, the circle will not appear until AFTER you release the mouse.
- To draw rectangle(s), click on the "Rectangle" option and then click and drag your mouse from one corner of each rectangle to the opposite corner.
- To draw line(s), click on the "Line" option and then click and drag your mouse from one end of the line to the opposite end. Note: In Mozilla/firefox browsers, the circle will not appear until AFTER you release the mouse.
- To draw text, click on the "Text" option. An entry field appears where you type your text. There are three ways to place the text on the map: Using all three methods, you specify a point, and the text appears below and to the right of the selected point.
 - At cursor click. Each time you click the mouse on the map, the text will be placed at that location.

- At latitude/longitude. You specify the latitude and longitude where the text should be placed, and click on the "Set Text On Map" button.
- At state plane coordinates. You specify the northing and easting coordinates (in your local state plane coordinate system) where the text should be placed, and click on the "Set Text On Map" button.